Amendments to the Claims:

The listing of claims below will replace all prior versions and listings of claims in the application. The changes to currently amended claims are shown using strikethrough to identify deleted material and underlining to identify added material.

Listing of Claims:

1-71. (canceled)

72. (currently amended) A conjugate comprising a synthetic polymer carrier ~~having~~ comprising a minimum of 5 and a maximum of 100 monomeric units, the monomeric units comprising ~~selected from the group consisting of nucleotides and~~ amino acids, the conjugate ~~containing~~ comprising 1-10 hapten molecules and 1-10 marker groups or solid phase binding groups, wherein the hapten molecules and the marker groups or solid phase binding groups are coupled to reactive side groups at predetermined positions on the polymeric carrier, such that distances between the hapten molecules and the marker groups or solid phase binding groups are defined thereby, and ~~wherein the carrier is non-immunologically reactive when the monomeric units are amino acids~~ wherein the reactive side groups are selected from the group consisting of amino groups, thiol groups, and a combination thereof.

73. (currently amended) The conjugate as claimed in claim 72, wherein the ~~monomeric units are amino acids and the conjugate contains~~ marker groups ~~which are~~ comprise luminescent metal chelates.

74. (currently amended) The conjugate as claimed in claim 72, wherein the polymeric carrier has ~~3~~5-80 monomeric units.

75. (previously presented) The conjugate as claimed in claim 72, wherein the polymeric carrier has 5-60 monomeric units.

76. (previously presented) The conjugate as claimed in claim 72, wherein the conjugate contains 1-6 hapten molecules.

77. (previously presented) The conjugate as claimed in claim 72, wherein the conjugate contains 2-8 marker groups or solid phase binding groups.

78. (canceled)

79. (canceled)

80. (canceled)

81. (currently amended) The conjugate as claimed in claim 72, wherein the conjugate ~~contains~~ comprises marker groups ~~which are~~ selected from the group consisting of luminescent metal chelates, ~~and~~ fluorescent groups, and a combination thereof.

82. (withdrawn) The conjugate as claimed in claim 72, wherein the conjugate contains solid phase binding groups which are selected from the group consisting of biotin and biotin analogues.

83. (previously amended) The conjugate as claimed in claim 72, wherein the polymeric carrier contains a charged group selected from the group consisting of positively charged groups and negatively charged groups.

84. (previously amended) The conjugate as claimed in claim 81, wherein the marker groups are luminescent metal chelates and the polymeric carrier contains a charged group selected from the group consisting of positively charged groups and negatively charged groups.

85. (currently amended) The conjugate as claimed in claim 81, wherein the marker groups are fluorescent groups ~~and the polymeric carrier has a helical structure~~.

86. (previously presented) The conjugate as claimed in claim 72, wherein each of the hapten molecules is an immunologically reactive molecule having a molecular mass of 100-2000 Daltons.

87. (previously amended) The conjugate as claimed in claim 86, wherein the hapten molecules are selected from the group consisting of pharmacologically active substances, hormones, vitamins and neurotransmitters.

88. (previously presented) The conjugate as claimed in claim 72, wherein the hapten molecules are immunologically reactive peptide epitopes having a length of up to 30 amino acids.

89. (withdrawn) The conjugate as claimed in claim 72, wherein the hapten molecules are nucleic acids having a length of up to 50 nucleotides.

90-99. (canceled)

100. (currently amended) A conjugate comprising a synthetic polymeric carrier ~~having~~ comprising a minimum of 5 and a maximum of 100 monomeric units, the monomeric units comprising ~~selected from the group consisting of nucleotides and~~ amino acids, the conjugate ~~containing~~ comprising 2-10 hapten molecules and 1-10 marker groups or solid phase binding groups, wherein the hapten molecules and the marker groups or solid phase binding groups are coupled to reactive side groups at predetermined positions on the polymeric carrier, such that distances between the hapten molecules and the marker groups or solid phase binding groups are defined thereby, and wherein the reactive side groups are selected from the group consisting of amino groups, thiol groups, and a combination thereof.

101. (canceled)

102. (canceled)

103. (canceled)

104. (canceled)

105. (canceled)

106. (canceled)

107. (new) The conjugate of claim 72, wherein the side groups through which the hapten molecules and the marker groups or the solid phase binding groups are bound to the carrier are either amino groups or thiol groups.

108. (new) The conjugate of claim 72, wherein at least a portion of the amino acids comprises artificial amino acids.

109. (new) The conjugate of claim 108, wherein the artificial amino acids comprise β-alanine, γ-amino-butyric acid, ε-amino-caproic acid, norleucine, ornithine, and combinations thereof.

110. (new) The conjugate of claim 72, wherein the carrier is non-immunologically reactive

111. (new) The conjugate of claim 72, wherein the amino groups are primary amino groups.

112. (new) The conjugate of claim 72, wherein the hapten molecules are selected from the group consisting of antibiotics, opiates, amphetamines, barbiturates,

cytostatic agents, paracetamol, salicylates, phenytoin, quinine, quinine derivatives, theophyllin, hormones, metabolites, bile acids, sexual hormones, corticoids, cardenolides, cardenolide-glycosides, steroid-sapogenines, steroid alkaloids, peptide hormones, creatinine, thyroid hormones, neurotransmitters, vitamins, mediators, and combinations thereof.

113. (new) The conjugate of claim 112, wherein the cytostatic agents are selected from the group consisting of gentamicin, tobramycin, vancomycin, and combinations thereof; wherein the hormones are sterols; wherein the sexual hormones are selected from the group consisting of estradiol, estriol, testosterone, progesterone, pregnenolone, estradiol derivatives, estriol derivatives, testosterone derivatives, progesterone derivatives, pregnenolone derivatives, and combinations thereof; wherein the corticoids are selected from the group consisting of cortisol, corticosterone, cortisone, cortisol derivatives, corticosterone derivatives, cortisone derivatives, and combinations thereof; wherein the cardenolide-glycosides are selected from the group consisting of digoxin, digoxigenin, strophanthin, bufadienolides, and combinations thereof; wherein the thyroid hormones are selected from the group consisting of T_3, T_4, and a combination thereof; wherein the neurotransmitters are selected from the group consisting of serotonin, choline, γ-aminobutyric acid, and combinations thereof; and wherein the mediators are selected from the group consisting of prostaglandins, leucotrienes, leucoendiines, thromboxanes, and combinations thereof.

114. (new) The conjugate of claim 88, wherein the immunologically reactive peptide epitopes having a length of up to 30 amino acids are derived from (a) a pathogenic organism selected from the group consisting of bacteria, viruses, protozoa, and combinations thereof; or (b) autoimmune antigens.

115. (new) The conjugate of claim 114, wherein the immunologically reactive peptide epitopes having a length of up to 30 amino acids are derived from a viral antigen selected from the group consisting of the amino acid sequence of HIV I, the amino acid sequence of HIV II, the hepatitits C virus, and combinations thereof.

SUPPORT FOR AMENDMENT

Claims 78-80 and 101-106 have been canceled without prejudice to their continued prosecution in a continuation and/or divisional application.

The amendments to independent claims 72 and 100 are supported by canceled claim 80 and by the description in the specification (e.g., page 6, lines 13-18; page 6, lines 29-32; page 12, lines 10-16; page 13, lines 11-16). Applicants note that the addition of the language "such that distances between the hapten molecules and the marker groups or solid phase binding groups are defined thereby" to each of independent claims 72 and 100 was made solely for purposes of clarification and to emphasize the meaning of the phrase "predetermined positions" set forth in the specification (e.g., page 6, lines 5-27).

Dependent claims 73, 81, and 85 have been clarified. The amendment to dependent claim 74 is supported by the description in the specification (e.g., page 6, lines 29-32). New dependent claim 107 is supported by canceled claim 101. New dependent claim 108 is supported by canceled claim 103. New dependent claim 109 is supported by canceled claim 104. New dependent claim 110 is supported by canceled claim 105 and by the description in the specification (e.g., page 16, lines 3-8). New dependent claim 111 is supported by the description in the specification (e.g., page 12, lines 10-16; page 13, lines 11-16). New dependent claims 112-115 are supported by the description in the specification (e.g., page 7, line 31 to page 9, line 8; page 9, lines 10-16).

No new matter has been added. Upon entry of this Response, claims 72-77, 81, 83-88, 100, and 107-115 are present and active in the application with claims 82 and 89 being presently withdrawn as directed to non-elected species.